

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Constantin Bulucea, Rebecca Rossen
 Assignee: Siliconix, Incorporated
 Title: TRENCH DMOS POWER TRANSISTOR WITH FIELD-SHAPING
 BODY PROFILE AND THREE-DIMENSIONAL GEOMETRY
 Serial No.: 08/086,976 Filed: 07/02/93
 Examiner: J. Carroll Group Art Unit: 2508
 Attorney Docket No.: M-799-2D US

San Jose, California
 September 30, 1994

COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D. C. 20231

RECEIVED

OCT 21 1994

AMENDMENT

GROUP 2500

Sir:

In response to the Office Action of 6/8/94, Applicant submits the following remarks and requests the Examiner's reconsideration of Claims 17-29.

REMARKS

Claims 17-29 are pending.

The Examiner rejected Claims 17-29 under 35 U.S.C. § 103 over Tonnel (U.S. Patent 4,420,379), stating:

[With respect to Claim 17, a] peripheral cell shown in Figure 3 includes at least one trench extending into epitaxial layer (21) to a finite depth, d1, source regions (26) formed in a body region portion (25) that extends a finite depth, d2, at one location, whereby the body region includes a peripheral portion (22) at another location extending a finite depth, d3. Examining cross-section profile shown in Figure 12, we find that, as opposed to the rendering of Figure 3, Tonnel fully expected that the each of d1 and d2 to be less than d3, that d1 exceeds d2 and that a distance between either trench and either peripheral body region (22) exceed a distance between either trench and an adjacent body portion region (25). We thus conclude it to have been obvious for one to have accordingly disposed the regions, portions and trenches of the Figure 3 embodiment.

In re Claims 22 and 23, evidently from Figures 3 and 12, Tonnel expected a DMOS

LAW OFFICES OF
 SKJEVEN, MORRELL,
 MacPHERSON, FRANKLIN
 & FREEL

23 METRO DRIVE
 SUITE 700
 SAN JOSE, CA 95110
 (408) 283-1222
 FAX (408) 283-1233

L:\DMS\7910\UM-799-2D\0105823.WP